

CLAIMS

1. In a communication system including at least a base station for providing communication services to a number of mobile stations through at least reverse link signals, a method for determining reverse link communications load level of said communication system comprising:

receiving said reverse link signals from said number of mobile stations, wherein each reverse link signal carries at least a pilot channel, a reverse link rate indicator channel, and a data channel;

for each received reverse link signal:

a) determining a first signal power ratio of said pilot channel power level to said received reverse link signal power level;

b) determining reverse link rate indicator information carried by said received reverse link rate indicator channel;

c) determining, based on said reverse link rate indicator information, a predetermined ratio of said data channel power level to said pilot channel power level;

d) scaling said first signal power ratio by said predetermined ratio to determine a second signal power ratio of said data channel over said received reverse link signal power level;

summing said second signal power ratio for each of said received reverse link signals to determine said reverse link communication load level of said communication system.

2. The method as recited in claim 1 further comprising:

determining whether to allow communication access to at least one of said mobile stations based on said reverse link communication load level.

3. The method as recited in claim 1 further comprising:

2 determining whether to reduce communication data rate of at least one
of said mobile stations to allow communication access to at least one other of
4 said mobile stations based on said reverse link communication load level.

4. The method as recited in claim 1 further comprising:
2 determining rise level of said reverse link communication based on said
reverse link communication load level.

5. The method as recited in claim 4 further comprising:
2 determining whether to allow communication access to least one of said
mobile stations based on said rise level.

6. The method as recited in claim 5 further comprising:
2 determining whether to reduce communication data rate of at least one
of said mobile stations to allow communication access to at least one other of
4 said mobile stations based on said on said rise level.

7. In a communication system including at least a base station for providing
2 communication services to a number of mobile stations through at least reverse
link signals, an apparatus for determining reverse link communications load
4 level of said communication system comprising:

a receiver for receiving said reverse link signals from said number of
6 mobile stations, wherein each reverse link signal carrying at least a pilot
channel, a reverse link rate indicator channel and a data channel;

8 wherein said receiver includes a control system, a searcher, a finger
element, and a decoder operating for each received reverse link signal to:

10 a) determine a first signal power ratio of said pilot
channel power level over said received reverse link signal power
12 level;

b) determine a reverse link rate indicator information
14 carried by said received reverse link rate indicator channel;

- 16 c) determine, based on said reverse link rate indicator
information, a predetermined ratio of said data channel power
level over said pilot channel power level;
- 18 d) scale said first signal power ratio by said
predetermined ratio to determine a second signal power ratio of
20 said data channel over said received reverse link signal power
level;
- 22 wherein said receiver is operative to sum said second signal power ratio
for each of said received reverse link signals to determine said reverse link
24 communication load level of said communication system.

0053744-090100

8. The apparatus as recited in claim 7 wherein said receiver determines
2 whether to allow communication access to at least one of said mobile stations
based on said reverse link communication load level.

9. The apparatus as recited in claim 7 wherein said receiver determines
2 whether to reduce communication data rate of at least one of said mobile
stations to allow communication access to at least one other of said mobile
4 stations based on said reverse link communication load level.

10. The apparatus as recited in claim 7 wherein said receiver determines rise
2 level of said reverse link communications based on said reverse link
communication load level.

11. The apparatus as recited in claim 10 wherein said receiver determines
2 whether to allow communication access to at least one of said mobile stations
based on said rise level of said reverse link communications.

12. The apparatus as recited in claim 10 wherein said receiver determines
2 whether to reduce communication data rate of at least one of said mobile

stations to allow communication access to at least one other of said mobile
4 stations based on said rise level.

09653744-090100